SEQUENCE LISTING

<110> Singh, Yogendra
Khanna, Hemant

<120> A NOVEL PROTEIN MOLECULE USEFUL FOR INHIBITION OF ANTHRAX TOXIN

<130> 4752 103.1 US

<150> 09/821,348
<151> 2001-03-29

<160> 6

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 735
<212> PRT
<213> Artificial Sequence

<220>
<223> Derived from B. anthracis.

<400> 1

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Glu Val Lys Gln Glu Asn Arg Leu Leu Asn Glu Ser Glu Ser Ser Ser
 1               5                  10                  15
Gln Gly Leu Leu Gly Tyr Tyr Phe Ser Asp Leu Asn Phe Gln Ala Pro
            20                  25                  30
Met Val Val Thr Ser Ser Thr Thr Gly Asp Leu Ser Ile Pro Ser Ser
        35                  40                  45
Glu Leu Glu Asn Ile Pro Ser Glu Asn Gln Tyr Phe Gln Ser Ala Ile
    50                  55                  60
Trp Ser Gly Phe Ile Lys Val Lys Lys Ser Asp Glu Tyr Thr Phe Ala
65                  70                  75                  80
Thr Ser Ala Asp Asn His Val Thr Met Trp Val Asp Asp Gln Glu Val
                85                  90                  95
Ile Asn Lys Ala Ser Asn Ser Asn Lys Ile Arg Leu Glu Lys Gly Arg
            100                 105                 110
Leu Tyr Gln Ile Lys Ile Gln Tyr Gln Arg Glu Asn Pro Thr Glu Lys
        115                 120                 125
Gly Leu Asp Phe Lys Leu Tyr Trp Thr Asp Ser Gln Asn Lys Lys Glu
    130                 135                 140
Val Ile Ser Ser Asp Asn Leu Gln Leu Pro Glu Leu Lys Gln Lys Ser
145                 150                 155                 160
Ser Asn Ser Arg Lys Lys Arg Ser Thr Ser Ala Gly Pro Thr Val Pro
                165                 170                 175
Asp Arg Asp Asn Asp Gly Ile Pro Asp Ser Leu Glu Val Glu Gly Tyr
            180                 185                 190
Thr Val Asp Val Lys Asn Lys Arg Thr Phe Leu Ser Pro Trp Ile Ser
        195                 200                 205
Asn Ile His Glu Lys Lys Gly Leu Thr Lys Tyr Lys Ser Ser Pro Glu
    210                 215                 220
Lys Trp Ser Thr Ala Ser Asp Pro Tyr Ser Asp Phe Glu Lys Val Thr
```

```
225                 230                 235                 240
Gly Arg Ile Asp Lys Asn Val Ser Pro Glu Ala Arg His Pro Leu Val
                245                 250                 255
Ala Ala Tyr Pro Ile Val His Val Asp Met Glu Asn Ile Ile Leu Ser
            260                 265                 270
Lys Asn Glu Asp Gln Ser Thr Gln Asn Thr Asp Ser Gln Thr Arg Thr
        275                 280                 285
Ile Ser Lys Asn Thr Ser Thr Ser Arg Asp Ala Asn Thr Val Gly Val
    290                 295                 300
Ser Ile Ser Ala Gly Tyr Gln Asn Gly Phe Thr Gly Asn Ile Thr Thr
305                 310                 315                 320
Ser Ala Gly Phe Ser Asn Ser Asn Ser Ser Thr Val Ala Ile Asp His
                325                 330                 335
Ser Leu Ser Leu Ala Gly Glu Arg Thr Trp Ala Glu Thr Met Gly Leu
            340                 345                 350
Asn Thr Ala Asp Thr Ala Arg Leu Asn Ala Asn Ile Arg Tyr Val Asn
        355                 360                 365
Thr Gly Thr Ala Pro Ile Tyr Asn Val Leu Pro Thr Thr Ser Leu Val
    370                 375                 380
Leu Gly Lys Asn Gln Thr Leu Ala Thr Ile Lys Ala Lys Glu Asn Gln
385                 390                 395                 400
Leu Ser Gln Ile Leu Ala Pro Asn Asn Tyr Tyr Pro Ser Lys Asn Leu
                405                 410                 415
Ala Pro Ile Ala Leu Asn Ala Gln Asp Asp Phe Ser Ser Thr Pro Ile
            420                 425                 430
Thr Met Asn Tyr Asn Gln Phe Leu Glu Leu Glu Lys Thr Lys Gln Leu
        435                 440                 445
Arg Leu Asp Thr Asp Gln Val Tyr Gly Asn Ile Ala Thr Tyr Asn Phe
    450                 455                 460
Glu Asn Gly Arg Val Arg Val Asp Thr Gly Ser Asn Trp Ser Glu Val
465                 470                 475                 480
Leu Pro Gln Ile Gln Glu Thr Thr Ala Arg Ile Ile Phe Asn Gly Lys
                485                 490                 495
Asp Leu Asn Leu Val Glu Arg Arg Ile Ala Ala Val Asn Pro Ser Asp
            500                 505                 510
Pro Leu Glu Thr Thr Lys Pro Asp Met Thr Leu Lys Glu Ala Leu Lys
        515                 520                 525
Ile Ala Phe Gly Phe Asn Glu Pro Asn Gly Asn Leu Gln Tyr Gln Gly
    530                 535                 540
Lys Asp Ile Thr Glu Phe Asp Phe Asn Phe Asp Gln Gln Thr Ser Gln
545                 550                 555                 560
Asn Ile Lys Asn Gln Leu Ala Glu Leu Asn Ala Thr Asn Ile Tyr Thr
                565                 570                 575
Val Leu Asp Lys Ile Lys Leu Asn Ala Lys Met Asn Ile Leu Ile Arg
            580                 585                 590
Asp Lys Arg Phe His Tyr Asp Arg Asn Asn Ile Ala Val Gly Ala Asp
        595                 600                 605
Glu Ser Val Val Lys Glu Ala His Arg Glu Val Ile Asn Ser Ser Thr
    610                 615                 620
Glu Gly Leu Leu Leu Asn Ile Asp Lys Asp Ile Arg Lys Ile Leu Ser
625                 630                 635                 640
Gly Tyr Ile Val Glu Ile Glu Asp Thr Glu Gly Leu Lys Glu Val Ile
                645                 650                 655
Asn Asp Arg Tyr Asp Met Leu Asn Ile Ser Ser Leu Arg Gln Asp Gly
            660                 665                 670
Lys Thr Phe Ile Asp Phe Lys Lys Tyr Asn Asp Lys Leu Pro Leu Tyr
        675                 680                 685
```

```
Ile Ser Asn Pro Asn Tyr Lys Val Asn Val Tyr Ala Val Thr Lys Glu
    690                 695                 700
Asn Thr Ile Ile Asn Pro Ser Glu Asn Gly Asp Thr Ser Thr Asn Gly
705                 710                 715                 720
Ile Lys Lys Ile Leu Ile Phe Ser Lys Lys Gly Tyr Glu Ile Gly
                725                 730                 735
```

<210> 2
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Derived from B. anthracis.

<400> 2

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Asp Ala Asn Thr Val Gly Val Ser Ile Ser Ala Gly Tyr Gln Asn Gly
 1               5                  10                  15
Phe Thr Gly Asn Ile Thr Thr
            20
```

<210> 3
<211> 23
<212> PRT
<213> Bacillus anthracis

<400> 3

```
Thr His Thr Ser Glu Val His Gly Asn Ala Glu Val His Ala Ser Phe
 1               5                  10                  15
Phe Asp Ile Gly Gly Ser Val
            20
```

<210> 4
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic.

<400> 4

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gatgctaata ctgtaggagt ttcaatttca gcagggtatc agaacggctt tactggtaat   60
atcactaca                                                           69
```

<210> 5
<211> 110
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic.

<400> 5

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attactaaat cctgcagatg tagtgatatt accagtaaag ccgttctgat accctgctga   60
aattgaaact cctacagtat tagcatccct acttgtagaa gtatttttac              110
```

<210> 6

<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic.

<400> 6
gtgattaata aagcttctaa ttc 23